

TVA Board Listening Session: Energy Efficiency and Demand Response:  
The Environment. March 5, 2008

Don Safer, Board Chairman, Tennessee Environmental Council

Thank you for scheduling these important listening sessions. I respectfully appreciate the opportunity to speak for many environmentally concerned Tennesseans. I am honored to be a participant in these proceedings.

Energy efficiency and demand response are crucial, first step action items in our efforts to minimize the global climate challenges we face. These are the environmental first choice: waste not, want not is a core value. The benefits of using less energy to continue the evolution of human society accrue economically, socially and environmentally. Doing more with less is a satisfying, gratifying experience at all levels. More and more people and large organizations are becoming aware of the importance of increasing energy efficiency. It is becoming like motherhood and apple pie. The real question is what level of commitment TVA is willing to give to these strategies. And how much TVA is willing to rely on implementation of these to meet our future energy needs.

From the environmental perspective global warming is a threat of the highest magnitude, which demands a concerted, all out effort to build a sustainable society. We need to engage and use the best of human effort to respond quickly and effectively to reduce our production of greenhouse gases and bring our lifestyles and economies into phase with our planet's life support systems. We all need clean water and clean air. The only place we have to live is this thin habitable biosphere provided by the Earth. We all value our own and our descendents' future. Not only do we need a healthy planet, we want a healthy economy. The two are interdependent and help to support healthy societies. This is the triple bottom line: social, economic, and environmental and that is only possible on a healthy planet.

When it comes to electrical energy, a key component of that healthy triple bottom line, we are caught between the rock and a hard place of Tennessee folklore. Coal brings a host of environmental problems at every step in its supply chain. It is a major greenhouse gas contributor. Mountain top removal mining destroys the iconic mountains we love while tearing apart neighboring communities and devastating our precious headwater streams.

Jumping from coal to more nuclear is going from the frying pan into the fire. Nuclear plants are a serious risk, both from accidents and terrorism. They are extremely expensive. Nuclear waste continues to build up at every operating facility, with no good place to put it for years into the future, if ever. We should do as S. David Freeman, former Chairman of TVA, has recommended in his latest book, Winning our Energy Independence: plan to phase out all coal and nuclear plants as soon as possible. I know

that sounds like science fiction, but today's mundane technologies such as cell phones, fax machines, email, the internet were all considered just as unbelievable less than 50 years ago. As we suffer from this drought of historic proportions we have found even our hydro-electric capacities are vulnerable to previously unthinkable low reservoir levels. The drought also affected the operations of the Brown's Ferry nuclear plant, which had to be shut down at times of peak demand because of cooling water issues.

The situation is dire, but not hopeless. There are solutions and we are here today to talk about reducing our energy usage: the first, quickest, and most cost efficient response. The topic tomorrow, renewable energy sources, is the next step. The fact that TVA has scheduled these meetings is cause for hope and, in my view, cautious optimism. How we respond to challenges is always a measure of character and in America's history we have met every challenge we have faced. Energy conservation programs have been successful at TVA in the past, and they have laid the foundation for success in the Board's goal of 1200 mw in reductions in the next five years.

This is not our first time around the block on energy efficiency and demand response. TVA and many other utilities as well as state, local and national governments have much experience in these areas and have been working on these for years, usually with much more intensity in response to emergencies. Whenever we have been forced to cut back on our energy usage we have been able to respond in an appropriate manner. Unfortunately, when the crisis was over most Americans reverted to previous energy use patterns. This left the eco-pioneers and those utility conservation programs that survived to explore the cutting edges of energy efficiency and renewables without much public support.

Through all this there have been technological advances which have spread through the marketplace and from which we all benefit: improved building codes, compact fluorescent light bulbs, higher efficiency appliances, to name a few. Much has been learned but the implementation throughout the U.S. has been extremely uneven. Areas like California and New England have much lower per capita electricity usage than that of the Tennessee Valley. TVA should move to quickly implement those programs that have proven successful and cost effective. The next steps are developing more innovative pilot programs such as the ones TVA has started.

I support TVA's commitment stated in the 2007 Strategic Plan: "In partnership with others, TVA will strive to be a leader in energy-efficiency improvements and peak demand reduction . . ." This sets the bar high. In any discussion of peak demand reduction it is important to note the contributions that on-site photo-voltaic can make: the sun is shining its brightest during our peak summer loads.

The good news being created by all the bad environmental news and terrifying forecasts of the impending incomprehensible global climate changes is the eco-pioneers and energy conservation geeks are not so lonely anymore. More and more people understand the realities we are faced with, and suddenly priorities are changing on the societal, cultural level. Perhaps the recent drop in Tennessee Valley electrical usage is an

early indication of this shift. Reflecting these concerns, the U.S. Congress has placed a much higher priority on addressing climate change than in previous years.

Last November the Tennessee Environmental Council and Tennessee Conservation Voters held The Summit for a Sustainable Tennessee at David Lipscomb University in Nashville. Over 200 people representing 80+ organizations and government agencies from across the state came together for 2 -3 days to agree on our 2008 priorities to move forward the shared vision of a Sustainable Tennessee. The identified number one priority is responding to the challenges of climate change: lessening our carbon footprint, both individually and collectively in the state of Tennessee. TVA can play a key role in the progress we make in creating a sustainable Tennessee. TVA has been a big part of the economic and social progress we have seen since its inception. I encourage TVA to partner with state and local governments to build this bright future. TVA can help put the states in the Tennessee Valley in a position to create the “green jobs” being discussed in the current Presidential campaign.

Tennessee Governor Phil Bredesen has recently announced his intentions to address energy efficiency at the state level. TVA and state government should work together to create the most energy savings possible. The Bonneville Power Authority worked with the states of Washington and Oregon to increase energy efficiency in those states’ building codes. Our current building codes do not maximize energy performance. There are many opportunities, for example: Amory Lovins of the Rocky Mountain Institute says that electrical standards call for minimum safe standards for wire size and do not take into account the energy savings possible from larger gauge wires.

TVA is in a virtually unique position to lead the United States and the world in forging our energy efficiency, conservation and demand response programs. There are no stockholders who want to maximize short term profit. Craven Crowell, former Chairman of TVA, said to the Oak Ridge Rotary Club, Aug. 26, 1999:

“Unlike private utilities, we can and we must take a more visionary view of the long-term energy needs of our region, and the world. We must make decisions that serve the greater good, even when the near-term economic benefits may not be readily apparent. That’s what sets TVA apart from other utilities.”

The structure and ownership of the distribution network is consistent with and conducive to actualizing this vision. The power distributors should be supportive and participatory in creating the new energy efficient Tennessee Valley. Municipal or co-op, the ultimate owners are the users of the electricity: all money saved will stay with those customers.

TVA could become a key player in our nationwide all-out effort to respond to the challenges of global climate change. Big challenges can be turned into huge opportunities for those with a bold vision and the ability to respond effectively. This critically important mission will be facilitated by the convergence of environmental,

social, political, technological, and economic factors. I hope that TVA will embrace this challenge enthusiastically with the kind of commitment that has created the successes in its history.